

Poliovirus Type 3 (PV3) Containment after Declaration of Wild Poliovirus Type 3 (WPV3) Eradication

In February 2019, the Global Commission for the Certification of the Eradication of Poliomyelitis (GCC) stated its intention to certify the eradication of wild poliovirus type 3 (WPV3) in late 2019 or early 2020. Once WPV3 has been declared eradicated, the global community will be required to identify, destroy, or contain in certified facilities type 3 poliovirus (PV3) infectious and potentially infectious materials. While the September 2015 declaration of wild poliovirus type 2 eradication was linked to the withdrawal of the type 2 component of the oral polio vaccine, currently, removal of OPV3 is not the priority of the programme. This is consistent with the Strategic Advisory Group of Experts (SAGE) on Immunization discussions and recommendations which acknowledge that the removal of the type 3 oral polio vaccine (OPV3) from bOPV upon declaration of WPV3 eradication would be an enormous programmatic and regulatory task.¹ SAGE agreed that the current priorities for GPEI are to stop transmission of WPV1 in endemic countries and to stop persistent cVDPV2 outbreaks, and that removal of OPV3 might distract GPEI from its primary task of eradicating WPV. SAGE will make a formal recommendation on OPV3 removal when the GCC has decided to certify WPV3 eradication.¹

Containment of type 3 poliovirus (PV3) materials (which include PV3 wild, vaccine-derived, oral polio vaccine, and Sabin strains) will incorporate lessons learned from PV2 containment and reflect the ongoing use of bOPV. Upon global declaration of WPV3 eradication, the global PV3 containment strategy will include:

- Initial focus on WPV3 and type 3 vaccine-derived poliovirus (VDPV3) infectious materials (IM) and potentially infectious materials (PIM)²
- Containment of OPV3/Sabin3 only when OPV3 is no longer in use as a vaccine
- National surveys and inventories of WPV3/VDPV3 IM and PIM^{2,3}
- Verification of destruction of all unneeded WPV3/VDPV3 materials
- Containment of all remaining WPV3/VDPV3 IM and PIM in certified poliovirus-essential facilities (PEFs)
- Quality reviews of national survey processes

In 2018, the World Health Assembly urged all Member States to proceed with inventories and destruction of unneeded type 1 and 3 poliovirus materials.² Upon WPV3 eradication certification, these activities will be required for WPV3/VDPV3 IM and PIM, as they are for PV2 materials. The complexity and length of the process to ensure that these materials are properly identified and contained as required will vary greatly by country. Although countries will be completing WPV3 surveys and inventories using different methodologies and within different timeframes, the processes from each country will be reviewed against globally validated criteria.

Enrollment of facilities that do not work with PV2 but do retain WPV3/VDPV3 into the global Containment Certification Scheme (CCS) is anticipated. In addition, some countries that do not have PV2 facilities may need to establish a National Authority for Containment (NAC) in order to certify WPV3/VDPV3 facilities. Timelines for certification of WPV3/VDPV3 PEFs will need to be established.

In summary, upon certification of WPV3 eradication, PV3 containment efforts will focus on WPV3/VDPV3 IM and PIM.³ Countries must identify facilities with WPV3/VDPV3 IM and PIM, which then need to be destroyed, transferred, or retained within a PEF. Countries with facilities retaining WPV3/VDPV3 materials must have established NACs and enroll all facilities in the CCS. PV containment approaches in general, including those for OPV3/Sabin3 and type 1 polioviruses, will continue to evolve in response to developments in polio eradication and biorisk management.

¹ [Meeting of the Strategic Advisory Group of Experts on immunization, April 2019 – conclusions and recommendations.](#)

² [Countries are advised to include poliovirus types 1 and 3 in current containment efforts per WHA Resolution 71.16](#)

³ Some World Health Organization regions may require national poliovirus inventories that include PIM of all PV types